UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.upub.gov.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/017,368	12/13/2001	Mark S. Moriconi	ORACL-01453US3	8047	
80548 Fliesler Meyer	7590 11/17/200 LLP	8	EXAMINER		
650 California		POLTORAK, PIOTR			
14th Floor San Francisco, CA 94108			ART UNIT	PAPER NUMBER	
			2434		
			MAIL DATE	DELIVERY MODE	
			11/17/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/017,368	MORICONI ET AL				
Office Action Summary	Examiner	Art Unit				
	PETER POLTORAK	2434				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
Responsive to communication(s) filed on	action is non-final. nce except for formal matters, pro		e merits is			
Disposition of Claims						
4)  Claim(s) 19 and 21-31 is/are pending in the ap 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) 19 and 21-319/3/08 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b)  objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CF				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority document: 2. ☐ Certified copies of the priority document: 3. ☐ Copies of the certified copies of the priority document: application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National	Stage			
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) X Information Disclosure Statement(s) (PTO/SB/08)  Paper Not/S/Mail Date 8/14/08	4)  Interview Summary Paper No(s)/Mail De 5) Notice of Informal P	ate				

Art Unit: 2434

## **DETAILED ACTION**

 The amendment received on 9/3/08 and IDS received on 8/14/08 have been entered and considered.

## Response to Arguments

- 2. Applicant arguments have been carefully considered.
- In light of applicant amendments the objections and 35 USC § 112 first paragraph rejection cited in the previous Office Action are withdrawn.
- Applicant arguments are directed towards the newly introduced limitation. These limitations are addressed (underlined) in the rejection below.
- The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
- 6. Claims 1-9 and 21-31 have been examined.

## Claim Rejections - 35 USC § 103

7. Claims 1-2, 5, 7-8, 21-31 are rejected under 35 U.S.C. 103(a) as obvious over Brownlie et al. (U.S. Patent No. 6202157) in view of Donohue (U.S. Patent No. 6199204) and further in view of Chamberlain (U.S. Patent No. 6438749) or, in alternative, in further view of De Meno et al. (U.S. Publication 2001/0029517).
As per claims 1-2, 5, 7-8, 21-22, 24, 26-27, 29-31 Brownlie et al. teach a policy manager, coupled to a network, including a database for storing a security policy

Application/Control Number: 10/017,368

Art Unit: 2434

including a plurality of rules and a policy distributor, coupled to the database, for distributing the plurality of rules through the network (*Brownlie et al., col. 3 lines 25-34, line 54-col. 4 line 2*), a security engine located on a client coupled to the network, for storing a set of the plurality of rules constituting a local customized security policy received through the network from the policy distributor and for enforcing the local customized security policy with respect to an application at the client (*Brownlie et al., col. 4 lines 16-43, 51-52 and col. 5 lines 1-5*), an application, coupled to the security engine application rather than being embedded in the application (*Brownlie et al., Fig. 1 node 22, col. 4 lines 47-50 and col. 7 lines 43-49*) and the security policy including a plurality of rules for controlling access to securable objects (*Brownlie et al., col. 7 lines 1-22*).

Page 3

8. As per determining incremental changes applicable to the security engine, the examiner points out that computing environments are subject to constant changes that are the result of continuing evolution of corporate administrative structure as well as software advancement. In addition to ever changing corporate structures as well as security requirements, software itself evolves (for example it changes and is replaced) setting new requirements for user interactions.

This notion is also recognized by *Brownlie et al.* who anticipate a series of incremental changes to a security policy (*Brownlie et al., col. 1 lines 54-56, line 2 lines 29-30, col. 7 lines 50-54 etc.*).

However, *Brownlie et al.* is silent in regard to the specific implementation of incremental changes to a security policy. Specifically, *Brownlie et al.* do not disclose

Art Unit: 2434

that updates involve keeping track of a series of incremental changes, computing an accumulated delta that reflects the series of incremental changes and sending the accumulated delta to the subject implementing the changes (the security engine) from a distributor (the policy manager) such that the subject uses the delta to update the current setting (the current local customized security policy).

Donohue discloses the process of updating computing systems that involves keeping track of a series of incremental changes (Donohue, col. 7 line 59-col. 8 line10 and Fig. 2) computing an accumulated delta that reflects the series of incremental changes (e.g. col. 7 line 66-col. 8 line 2 and col. 9 lines 44-58) and sending the accumulated delta to the subject implementing the changes from a distributor such that the subject uses the delta to update the current setting (Donohue, col. 4 line 23-28). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to compute an accumulated delta that reflects the series of incremental changes and send the accumulated delta to the subject implementing the changes from a distributor such that the subject uses the delta to update the current setting giving the benefit of more efficient updates of security policies while saving network bandwidth.

(Note that Donohue's invention was used just as an example. However using the accumulated delta concept is old and well known in the art, see *Flynn et al.*, (U.S. Patent No. 5347653), Nachenberg et al. (U.S. Patent No. 6167407), etc.)

Art Unit: 2434

 As per newly introduced limitations, each change to a security policy (whether incremental or not) inherently includes one ore more rule changes in a security policy.

- 10. Additionally, the examiner points out that the as per keeping track of incremental changes in network environment it is infeasible to ensure that incremental changes are implemented by all subjects (clients with security engines) at the same time. For example, in addition to subjects available for updates, some may be shut down (e.g. a user taking vacation) and some may not be even in a distributor network (e.g. a user taking a laptop for a business trip). As a result, comprehensive updates to already present policy must account for the time difference that results in a different set of incremental changes distributed to policy subjects. Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to keep track of incremental changes that would allow computation of an accumulated delta that reflect the series of incremental changes (for a particular subject) distributed to a particular subject given the benefit of a comprehensive update of each subject using a minimum of network bandwidth and a flexible update schedule.
- 11. Furthermore, there are essentially only a few possibilities to update current configuration (such as policies) in order to reflect the most current desirable state (the most current overall configuration), which could include multiple intermediate updates. The newest most current overall configuration settings could be used to overwrite the current configuration. The changes could be implemented gradually, or only the difference (delta) between the current and most updated overall

Art Unit: 2434

configuration could be installed. (The last one reads on the claimed limitations) Any of these implementations, are obvious variations of each other. However, taking in consideration time and network bandwidth required to deliver and update all network subjects, the delta implementation would have been the most obvious choice.

Transferring less data via network minimize the use of the network bandwidth and less data to install speeds up the update process and minimize possibility of errors.

12. <u>Brownlie et al.</u> in view of <u>Donohue</u> do not suggest using the accumulated delta to reconstruct a previous state (e.g. the previously distributed locate customized security policy).

De Meno discloses using the accumulated delta to reconstruct a previous state (De Meno [0023]). Also, Chambelian discloses using the accumulated delta to reconstruct a previous state (Chambelian, Fig. 4 and 5, and associated text). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the accumulated delta to reconstruct a previous state given the benefit of returning the system to the previous state if the updating the local customized security policy with the accumulated delta result in failure or abortion.

13. Although in Fig. 1, *Brownlie et al.* discloses only one set of a security engine/application being guarded by a access authorization service set, Brownlie clearly discloses that there may be more than one client 22. Thus, different client have different set of a security engine/application being guarded by different access authorization service. Specifically, Brownlie teaches that "the system 10 also includes a plurality of network nodes 22 that have access to the public directory 20

Art Unit: 2434

through a network link 24" (*Brownlie et al.* col. 4 lines 16-18). Clearly, applications on different clients read on separate applications and by virtue of residing on different clients that have different security engines, these separate applications clearly do not share the same authorization services.

- 14. As per claims 25 and 29 *Brownlie et al.* changes inherently include one or more of adding, deleting and amending.
- 15. As per claims 22-23 and 27-28 the table disclosed by *Donohue* in Fig. 2 reads on a policy tracking table. Furthermore, Official Notice is taken that it is old and well-known practice to store data in a table and using the stored data in reconstruction of a computer systems to a previous state. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to reconstruct a computer state to the previous version using earlier stored and distributed data given the benefit of a guick troubleshooting of problems, potentially introduced by the data.
- 16. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brownlie et al. (U.S. Patent No. 6202157) in view of Donohue (U.S. Patent No. 6199204) and Chamberlain (U.S. Patent No. 6438749) or, in alternative, De Meno et al. (U.S. Publication 2001/0029517), and further in view of Wang (U.S. Patent No. 5956521). Brownlie et al. discloses that the policy manager and the policy distributor are hosted on a first server (Brownlie et al., col. 3 lines 27-34, 54-56 and 61-63), the security engine and the application are hosted on a second node, and the first and second

Art Unit: 2434

node are communicatively coupled to each other through the network (col. 3 lines 61-63).

17. Brownlie et al. in view of Donohue and Chamberlain or, in alternative, De Meno et al.do not explicitly teach that the second node is a server.

Wang teach a plurality of nodes that are servers (Wang, Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of applicant's enforceable security policy invention as disclosed by *Brownlie et al.* in view of *Donohue* and *Chamberlain* or, in alternative, *De Meno et al.*into systems with nodes that are servers as taught by *Wang*. One of ordinary skill in the art would have been motivated to perform such a modification in order to provide an enforceable flexible security policy for each network node including servers.

18. Claims 3-4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brownlie et al. (U.S. Patent No. 6202157) in view of Donohue (U.S. Patent No. 6199204) and Chamberlain (U.S. Patent No. 6438749) or, in alternative, De Meno et al. (U.S. Publication 2001/0029517), and further in view of TRCKA et al. (U.S. Pub. No. 20010039579) and Microsoft Press (Computer Dictionary, 3rd Edition, ISBN: 157231446XA, 1997).

Brownlie et al. in view of Donohue and Chamberlain or, in alternative, De Meno et al. disclose the security engine as discussed above.

As per claims 3, *Brownlie et al.* teach the security engine for evaluating a request to access the application based on the set of the plurality of rules and the application

Art Unit: 2434

and the engine to communicating (Brownlie et al., col. 4 lines 47-50 and col. 7 lines 43-49).

19. Brownlie et al. in view of Donohue and Chamberlain or, in alternative, De Meno et al. do not explicitly teach an application programming interface (API) for enabling communication between the application and the engine.

TRCKA et al. teach utilizing API in communication [101].

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide API for enabling communication between the application and the engine as taught by *TRCKA et al.* One of ordinary skill in the art would have been motivated to perform such a modification in order to code efficiency by allowing significant amount of code to be re-used [103].

20. Microsoft teaches a plug-in (Microsoft Press, pg. 370).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate a plug-in API as taught by *Microsoft*. One of ordinary skill in the art would have been motivated to perform such a modification in order to provide additional functionality (*Microsoft*, pg. 410).

## Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2434

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2434

/Peter Poltorak/

Examiner, Art Unit 2434

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2434